

# NATIONAL WEATHER SERVICE WESTERN REGION SALT LAKE CITY, UTAH



# **APRIL 3, 2002**

# **REGIONAL DIRECTOR**

MIC/HIC Workshop: The Hotel Monaco in Salt Lake City, UT will be the site of Western Region's MIC/HIC Workshop. The workshop will start at 1:00 p.m. on Monday, June 10, and end Thursday afternoon, June 13. The focus for the workshop will be the merging new technologies into the workplace. We have selected several field and regional staff members to plan, organize, and facilitate the workshop. I see this as a professional development activity for these individuals which will give them an opportunity to be exposed to problems and issues as well as the planning aspects. It will also give me an opportunity to get to know them better. Bob Tibi and Rich Douglas will serve as advisors for this team and they will help them get started. Elaine will assist the team as well.

Our workshop planning team members are: John Lovegrove, WCM Eureka Dave Runyan, WCM Phoenix Tanja Fransen, WCM Glasgow Mike Staudenmaier, SOO Flagstaff Carl Gorski, WRH MSD Kevin Schrab, WRH SSD Joe Intermill, NWRFC

**Send Us Your Digital Photos:** Beginning with this issue of Western Region Staff Notes, we will be including several photos of the NWS Western Region staff "in action." Photos depicting events, ceremonies and other outreach activities will be considered. Please be sure to send the photos in JPEG format and forward all photos to Elaine Robinson. Please include a caption for each photo as part of your email.

Encinitas, California Is "StormReady": Encinitas, California, became the first San Diego County community, and only the second locality in the state, to be classified "StormReady" by NOAA's National Weather Service. At the March 27 ceremony during the Encinitas City Council meeting, Dan Keeton, Meteorologist in Charge of the Weather Forecast Office in San Diego, and Ed Clark, the Warning Coordination Meteorologist, presented a plaque, a certificate letter, and two road signs to Encinitas Mayor Cristy Guerin and Tom Gallup, emergency preparedness officer. Encinitas is a coastline community of 60,000 residents. The landscape includes coastal beaches, rolling hills and is prone to high winds, heavy surf, fog, and winter storms. Encinitas has experienced storms that resulted in the closure of Highway 101 for several days and extensive damage to beaches and property. Keith



Harrison, California Office of Emergency Services Southern Regional Deputy Administrator, represented OES Director Dallas Jones at the ceremony. Local media carried two stories in the *North County Times*.

(L to R) Tom Gallup, Emergency Preparedness Officer, and Christy Guerin, Mayor of Encinitas, California., proudly display their new StormReady signs. NWS San Diego Meteorologist in Charge Dan Keeton presented the signs, a plaque and letter to city officials at the March 27 event.

### National Science Teachers Association Annual Meeting Held in San Diego

More than 16,500 teachers and school administrators from across the country attended the 50<sup>th</sup> Annual Meeting for the National Science Teachers Association in San Diego, Mar. 27-30. NSTA officials reported this was the largest gathering of teachers at a West Coast national meeting. NOAA's exhibit space included representatives from all NOAA line offices.

Staff from the NWS Forecast Office in San Diego and WRH/PA Marilu Trainor provided support to tell the NWS story. San Diego staff volunteers included Dan Keeton (MIC), Ed Clark (WCM), Richard Stitt (DAPM), and meteorologists Dan Atkin and Phil Gonsalves.

Thousands of pounds of NWS materials ranging from primary grade coloring books to weather safety brochures were distributed. Large posters highlighting global climate change, cloud formations, etc., were taken home by the teachers from every state as well as many Canadian provinces. Teachers commented on the effectiveness of the weather information on the NWS and NOAA websites. The next regional NSTA meeting will take place in Portland, OR in November,

2002.

NWS San Diego represents NWS during National Science Teachers Association Annual Meeting, March 27-30. Forecaster Phil Gonsalves (L) and Meteorologist in Charge Dan Keeton (far right) answered questions and distributed materials to teachers and administrators attending the 50th Annual NSTA meeting in San Diego.



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### **PUBLIC AFFAIRS**

Scheduling Congressional Visits to Your Office: It's not too early to work with the district staffs for your Congressional members representing your county warning areas. Although many of the members visited our forecast offices when they were dedicated, there are also many members who were elected in the past session. Here is a schedule for the remainder of the 107<sup>th</sup> Congress. Please be sure to let WRH/PA know when members are scheduled to visit.

NOTE: The list below identifies non-legislative periods (days that the Senate and House will not be in session) that might impact your planning schedule:

April 8 (Mon.) Senate reconvenes

May 27-31 Memorial Day District Work Period - not in session

June 3 (Mon.) Senate reconvenes

July 1 - 5 Independence Day District Work Period - not in session

July 4 Independence Day Senate reconvenes

September 3
August 5 - September 2
September 3 (Tues.)
October 4 House Summer District Work Period Senate not in session - August Recess

House and Senate reconvenes

House and Senate Target adjournment

# METEOROLOGICAL SERVICES DIVISION

**STATEMENT OF THE WEEK**: This week's statement of the week is Public Information Statement (PNS) which does a nice job summarizing snow fall totals from a storm. The product was prepared by lead forecaster Mike Johnson and HMT Matt Twitchell of WFO Missoula. We especially liked inclusion of elevation location, since most of the public would not remember just how high various locales are. Good work Mike and Matt!

GTFWRKPNS 000 TTAA00 KMSO DDHHMM

PUBLIC INFORMATION STATEMENT NATIONAL WEATHER SERVICE MISSOULA MT 900 PM MST MON APR 1 2002

STORM TOTAL SNOW ACCUMULATIONS FOR THE PAST 24 HOURS FOR WESTERN MONTANA AND NORTH CENTRAL IDAHO ARE LISTED BELOW.

TIME LOCATION ELEVATION SNOW (FEET) (INCHES) (MST)

FLATHEAD COUNTY MONTANA

400 PM FLATTOP MOUNTAIN 6229 10.5 (ESTIMATED)

400 PM 700 PM 830 PM	NOISY BASIN PIKE CREEK ESSEX	6040 5928 3870	5.0 (ESTIMATED) 6.5 (ESTIMATED) 5.0 (ESTIMATED)
400 PM	UNTY MONTANA MOSS PEAK POLSON	6781 2990	9.0 (ESTIMATED) 2.0
800 PM	A COUNTY MONTANA POINT SIX SEELEY LAKE R.S.	7400 4100	2.5 (ESTIMATED) 6.0
CLEARW 400 PM	ATER COUNTY IDAHO COOL CREEK	6279	4.0 (ESTIMATED)

**2002 Mark Trail Award Winners in WR**: Two Mark Trail Awards will be given to people with Western Region (WR) ties later this month in Washington DC. The Mark Trail Award is given to people who have increased the visibility and use of NOAA Weather Radio through their hard work and dedication. The WR winners are:

- 1) George Bisso, of Seattle, Washington will receive the Mark Trail Award for his effort on behalf on NOAA Weather Radio over a several year period. Mr. Bisso helped bring the Puget Sound transmitter to Miller Peak by finding the site location and arranging for the acquisition and installation of the equipment. In addition, he has been instrumental in completing the Washington state tsunami warning system, and during that project, he helped to create new transmitters at Mt. Octopus/Forks in 2000 and now is working to create a new NWR transmitter on Capitol Peak east of Olympia.
- 2) Mid Rivers Telephone Cooperative, Inc., Circle, Montana, working with NOAA's National Weather Service and using the U.S. Department of Agriculture, Rural Utilities Service grant program, is establishing four new transmitter sites, helping to fill the largest gap in NWR coverage within the United States in a non-mountainous area. Mid Rivers has donated tower space for antennas, climate conditioned space for transmitter equipment, over 1700 feet of underground phone cable, man-power, equipment.

#### HYDROLOGICAL SERVICES DIVISION

Advanced Hydrologic Prediction Services (AHPS) Products and Information Team Web Site: The AHPS Products and Information Team has established a Web site to keep everyone abreast on team activities. Currently, the Web site contains the team charter, time line, and summaries of conference calls. In the near future, a compilation of hydrologic information that is or could be provided by the NWS will be posted to the Web site. A listing of current graphical products is also in the works and should be available soon. The team will be posting a survey on the Web site for NWS employees to complete in order to obtain their perspectives of what hydrologic information the NWS should be providing to customers and how it can be presented to maximize understanding and usability. Notice will be provided through a number of channels when the survey is ready for use.

The URL of the Web site is: http://www.srh.noaa.gov/lmrfc/ahpsteam/

<u>AHPS Training</u>: An AHPS training session for the Montana offices east of the Continental Divide took place in Billings on March 20 and 21, 2002. The training was given by the MBRFC and WR HSD. Representatives from Billings, Glasgow, and Great Falls WFOs participated in the training. These offices are (or will soon be) posting AHPS graphics generated by the MBRFC on their Web sites.

#### SCIENTIFIC SERVICES DIVISION

<u>COMET UPDATE - Residence Classroom</u>: The COMET classroom hosted a two-week Winter Weather Course for the Meteorological Service of Canada that ended on March 1. There were 20 students, including 14 from MSC and 6 NWS participants.

Preparations continue for the Basin Customization Course to be held in April. COMET staff and instructors participated in software testing and a dry run using Arcview GIS for the course the week of March 11. The COMET classroom will also be hosting several sessions of the Eastern Region SOO Workshop the week of April 15.

With regard to AWIPS, Tim Alberta has installed the latest Linux version of the GFE, and this will be ported to the classroom in the near future.

- <u>Weather Event Simulator</u>: Cooperative Program for Operational Meteorology, Education and Training (COMET) Branch released three cases from the COMET Case Study Library for use with the weather event simulator (WES). These cases include the Fort Worth Tornado of 28 March 2000, East Coast Explosive Cyclogenesis of 24-25 January 2000, and Winter Severe Weather from 09 November 1998, and can be ordered from the COMET Branch (wes orders@comet.ucar.edu).

In support of the Warning Decision Training Branch (WDTB) WES simulation guide for the 29 June 1998 Iowa Bow Echo case study, the COMET Branch prepared dataset CD-ROMs for distribution with hardcopy of the guide. This case was distributed to Central Region offices of the National Weather Service with the WES software. All other offices will now be able to order the case using wes orders@comet.ucar.edu.

The COMET Branch released the WES simulation guide for the 10-11 April 2001 Great Plains Tornado Outbreak based on the WDTB simulation guides. Highlighted at the Central Region Warning Improvement Workshop in November 2001, the case will also be used in the Eastern Region workshop in April. With this release, six cases are available nationwide for use with WES.

- Science and Operations Officer Training Resource Center: Jeff Medlin has submitted WFO ORPG Proficiency Training to the SOO TRC and describes the training package as essentially converting 'UCP Proficiency' to that of the 'ORPG.' The training lasts about 8.5 hours and is a mix of CD-ROM, Web-based material and some topical readings on hydrometeorological optimization of the WSR-88D. You may download the training package from:

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- <u>Warning Coordination Meteorologist Resource Center</u>: Donna Franklin has added FEMA's National Flood Insurance Program Web site to the WCM Resource Center at:

(http://meted.ucar.edu/resource/wcm/html/105.htm)

This site provides information on the National Flood Insurance Program (NFIP) for communities that are StormReady or considering applying to become StormReady. The NFIP awards point to communities who are StormReady.

- <u>Aviation Meteorology Training</u>: Distance Learning Aviation Course (DLAC) reviews for several lesson components were completed and additional scripts were sent out to SMEs for review. A DLAC content review meeting is being organized and will take place on April 9-10. This is to provide expert and field forecaster review of content developed thus far. Rich Cianflone attended two RAMS Aviation Conferences, one in Pacific Region and the other in Eastern Region. Both provided abundant additional material for the DLAC course and provided an excellent forum to exchange ideas with NWS field personnel and aviation customers. Rich submitted a slightly revised DLAC plan to allow for overlap of development and delivery of the DLAC so that additional material can be incorporated into the course as identified at the RAMS conferences.
- <u>Climatology Training</u>: Final plans for the Climate Variability Workshop were completed by Rich Cianflone, in consultation with Klaus Weikmann and Marina Timofeyeva. The first workshop took place March 25-29, with SOOs and climate focal points from forecast offices in attendance.
- **NWP Training**: Bill Bua has been working on two ensemble cases. A case for the 27 November 2001 winter storm (semi-null event, winter storm criteria precipitation never really materialized) was completed and sent out for review. A case on ensemble forecasting for the 7-8 January 2002 surprise winter storm in PA and NY will be completed this week and sent out for review.

Bill Bua is making modifications to the RUC PCU2 cells in the NWP matrix in preparation for the RUC PCU2 upgrade implementation in early April.

We published a case entitled "Eta-12 Forecasts For Historic Lake Effect Snows in Buffalo, NY." This presents an examination of how the updated Eta-12 model, with its higher resolution, improved topography, and upgraded cloud and precipitation package, performed in forecasting the initiation and evolution of the first portion of the Buffalo, NY, historic lake effect snow event 24-26 December 2001.

Stephen Jascourt and Bill have submitted an abstract on NWP training to AMS's 19th conference on weather analysis and forecasting in San Antonio, TX, 12-16 August.

Stephen is starting up the Eta-12 teletraining this week and now has 15 sessions scheduled through the first week of May, with 40 offices signed up so far, The archiving of NWP Top Ten Misconceptions teletraining has been completed, so anyone downloading it now gets the version with audio and annotations.

Several additional caselets that are shown in the Eta-12 teletraining are being completed as PCU3 Web caselets.

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As of March 15, a total of 298 students have taken the NWP distance learning course and completed the final exam. The completion rates by NWS region are included below:

Alaska Region 1% Puerto Rico 1%
Central Region 7% Southern Region 8%
Easter Region 5% Western Region 78%

- IFPS: Kevin Fuell and Greg Byrd traveled to Kansas City on February 26 for the IFPS PDS planning meeting. The day before the meeting, Greg traveled with Kevin and other members of the IFPS training team to the Pleasant Hill, MS, WFO and spoke with the MIC (Lynn Maximuk) and the SOO (Pete Browning) regarding the use of IFPS on operational shifts. During the IFPS planning meeting, several PCUs and initial tasks were determined. Kevin wrote the expanded version of the 'Local Applications' PCU that will be submitted for review to the other PDS planning members in April. Kevin was tasked with finding existing GFE Smart Tool materials online and supplying a national Web resource site, with a targeted completion date of April 30. He has been in contact with Ken Waters regarding an IFPS course given by Southern Region that emphasized Smart Tools and IFPS methodology. Kevin continues to read the IFPS list server when possible to keep up-to-date on current IFPS issues. We are currently working with Brian Motta and FSL personnel to get Linux versions of IFPS installed and running on training development workstations.

- **Northern Latitude Meteorology**: Fifteen lectures were recorded during the aforementioned MSC Winter Weather Course, and the first of several of these, Slantwise Convection, is currently being developed into a Webcast. It includes a case exercise based on the accompanying laboratory exercise used during the course.

One of the topics covered in the February MSC/COMET Winter Weather Course was slantwise convection, which is related to the release of CSI (conditional symmetric instability). Techniques to diagnose or forecast the presence of CSI are not available in all MSC offices. One such technique is to calculate areas where EPV (equivalent potential vorticity) is less than zero; such areas correspond to zones of conditional instability or of CSI. Following comments from students on the Winter Weather Course, new EPV charts, based on the GEM regional forecast model, were developed at the Canadian Meteorological Centre in March. The goal of the charts is to provide a "heads-up" to the operational forecaster on the possibility of CSI, which might lead to slantwise convection. These charts are now available on the Web and can be accessed by meteorologists both inside and outside Canada.

The development team has completed the first two Ten Common NWP Misconceptions, and is nearing completion of the third, while development has also begun on the fourth and fifth. These, and the additional five misconceptions will be developed and published incrementally in the next several months. Although based on a teletraining session delivered last year, many of these will be customized with additional examples added for relevance to northern latitude forecast issues. The team is also working on a case exercise on extratropical transition to accompany the completed Webcast, "Hurricanes, Canadian Style: Extratropical Transition." The team will begin planning later this month for other possible distance learning projects this year.

- <u>Mesoscale Primer</u>: How Mesoscale Models Work foundation module reviews are complete and the module is in final QA stages at COMET. The Mountain/Valley Winds foundation module draft of additional content on 3-D aspects has been completed and is in review. A videotaped lecture by Wendell Nuss on coastal processes was recently completed. The Sea Breezes foundation module development is awaiting additional observational data from Wendell.

- Marine Meteorology Training: On March 13-14, Marine PDS producers met at COMET. Tom Ainsworth, executive producer, chaired the meeting. The objective was to review the status of developing materials for each PCU and to come to an agreement which units will be our priorities for the next 18 months. In addition, they were able to meet with Leroy Spayd, Joe Lamos, and COMET staff to discuss a variety of issues pertaining to resources deemed necessary by the Producers to advance the marine PDS. The group narrowed down the focus of FY03 to include three PCUs that address subject matter of universal importance to all marine weather forecasters: winds and waves.

#### SYSTEMS OPERATIONS DIVISION

<u>Cooperative Observer Program</u>: Congratulations to the WFOs at Flagstaff, Oxnard, and Portland for submitting 100% of their B91s (Record of River and Climatological Observations) to the National Climatic Data Center (NCDC) this past year.

AWIPS Linux CP Operational Acceptance Test: Operation Acceptance Testing (OAT) of the AWIPS Linux Communications Processor (CP) will take place over a period of 60 days during April and May 2002. Western Region Headquarters, WFO Pendleton, and WFO Portland will install Linux-based CPs as part of the OAT. WFO Boise will serve as one of the OAT control sites. These control sites are also known as Product Availability Monitoring Sites (PAMS). The CP OAT also includes hardware to support a High Speed LAN (HSL). OAT site personnel will be responsible for the installation and configuration of the Linux CPs and the HSL as per AWIPS System Modification Notes and instructions from the OAT director. The final report on the CP OAT is expected in the August time frame.